STATE OF CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD CENTRAL COAST REGION

STAFF REPORT FOR REGULAR MEETING OF FEBRUARY 17-18, 2022

Prepared on January 10, 2022

ITEM NUMBER: 7

SUBJECT: Revision of Waste Discharge Requirements, Reissuance

of National Pollutant Discharge Elimination System
Permit No. CA0047961 for San Simeon Wastewater
Treatment Plant, San Luis Obispo County, Order No. R3-

2022-0003

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KEY INFORMATION

Location: 9245 Balboa Ave, San Simeon, San Luis Obispo County

Type of Discharge: Treated domestic wastewater

Permitted Flow: 0.2 million gallons per day (MGD) (monthly average dry

weather flow); 0.45 MGD (peak wet weather flow)

Type of Treatment: Activated sludge, secondary clarification, and chlorination

Disposal Method: Ocean discharge and recycled water beneficial use

Reclamation: Landscape irrigation via truck deliveries

Existing Orders: Waste Discharge Requirements Order No. R3-2013-0021

ACTION: Adopt Order No. R3-2022-0003

SUMMARY

This staff report provides an overview of the proposed reissuance of the existing NPDES permit for the San Simeon Community Services District (Discharger) Wastewater Treatment Facility (Facility). Proposed Order No. R3-2022-0003 maintains the same effluent limitations and monitoring requirements from the previous order based on results of a reasonable potential analysis. The proposed order incudes requirements that ensure the discharge of treated wastewater is protective of water

¹ Per 40 CFR 122.4(d)(1)(i), reasonable potential analysis is required to determine whether a discharge, alone or in combination with other sources of pollutants to a waterbody and under a set of conditions arrived at by making a series of reasonable assumptions, could lead to an excursion from an applicable water quality standard. Regulations found in 40 CFR 122.4(d)(1)(i) also specify that the reasonable potential determination must apply not only to numeric criteria, but also to narrative criteria.

quality and beneficial uses, that ensure recycled water is treated to a standard that is protective of public health and the environment, and that ensure the continued function and viability of the Facility in a manner that is protective of water quality.

DISCUSSION

Background

The Discharger is currently discharging pursuant to Order No. R3-2013-0021, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0047961. The Discharger submitted an application dated April 6, 2018, for permit renewal to continue discharging 0.2 MGD of treated wastewater from the Facility.

The Discharger owns and operates a wastewater collection, treatment, and disposal facility, which provides wastewater services to the community of San Simeon and the Hearst San Simeon National Historic Monument Visitor Center. The Facility receives domestic and commercial wastewater and currently serves a population of approximately 462 people. In addition, the Facility receives intermittent flows of reverse osmosis concentrate from the San Simeon Community Services District drinking water treatment facility. The Facility has been in operation since 1961 and is considered a secondary treatment facility. The treatment system consists of a comminutor, a 90,000-gallon equalization basin, four activated sludge tanks, four clarifiers, a chlorine contact chamber, and dechlorination. A tertiary treatment package unit was constructed in 2012 to provide recycled water for irrigation use via water haulers within the service area.

Compliance History

The Discharger violated numeric effluent limitations twice during the term of the existing order, according to data collected from February 2014 through July 2021. Both violations were for total suspended solids and were dated May 2014 and August 2015, and neither resulted in any specific enforcement actions.

Changes from the Existing Order

The proposed order is structured in accordance with the statewide NPDES permit template. The proposed order retains the same effluent limitations and effluent monitoring requirements as the previous order. The proposed order includes the following changes and modifications, which are also discussed in detail in the proposed order's fact sheet:

1. Climate Change Adaptation Program. The proposed order requires the Discharger to submit a coastal hazards response plan to ensure the Discharger continues to identify and address climate change hazards and vulnerabilities at the Facility. The requirement to submit a coastal hazards response plan and the timeframe to do so reflect identical requirements in the Facility's Coastal Development Permit 3-19-0020, which was approved by the California Coastal Commission on July 11, 2019. The Facility and vicinity are subject to coastal

hazards related to coastal inundation and creek flooding, which will only be exacerbated with sea level rise. Inundation of the facility will result in discharges of untreated wastewater into the Pacific Ocean; therefore, the coastal hazards response plan is imperative to ensure continued function and viability of the Facility in a manner that is protective of water quality. The coastal hazards response plan must provide a clear, long-term plan for providing necessary wastewater treatment functions at an inland location (or locations) that are not subject to coastal hazards.

- 2. Hauled Saline Waste Disposal Program. The proposed order allows for the development of a hauled saline waste program that will allow the Facility to accept and discharge concentrates from water filtration systems² through the ocean outfall Discharge Point 001. Prior to discharging hauled saline waste through the ocean outfall, the Discharger must submit a hauled saline waste disposal study to the Executive Officer for approval. This order authorizes such discharges pending approval of the hauled saline waste study and institutes monitoring and reporting of hauled saline wastes.
- 3. **Production of Recycled Water**. The existing order serves as a master recycling permit pursuant to article 4, chapter 7, division 7 of the Water Code (commencing with section 13500), which provides regulatory coverage for the production, distribution, and use of recycled water. The proposed order allows the production of disinfected tertiary recycled wastewater in compliance with applicable state and local requirements; however, the distribution and offsite reuse of recycled water produced by the Facility is subject to the State Water Resources Control Board's (State Water Board) General Water Reclamation Requirements for Recycled Water Use (State Water Board Order No. WQ 2016-0068-DDW). As a result, the distribution and use of recycled water are not covered by the proposed order and Discharger will be required to enroll in WQ 2016-0068-DDW.
- 4. Annual Volumetric Reporting. To establish a realistic estimate of statewide recycled water use and potential for increased recycled water use statewide, the Recycled Water Policy and State Water Board Order No. WQ 2019-0037-EXEC require Dischargers to report the volume of treated wastewater and recycled water. The proposed order includes annual volumetric reporting requirements such that the annual report will meet implementation needs of the Recycled Water Policy and fill data gaps for additional statewide water planning efforts.

Climate Change

The Central Coast faces the threat and the effects of climate change for the foreseeable and distant future. To proactively prepare and respond, the Central Coast Water Board has launched the Central Coast Water Board's Climate Action Initiative, which identifies how the Central Coast Water Board's work relates to climate change and prioritizes actions that promote improve water supply resiliency through water conservation and

² Including, but not limited to, waste concentrates from such technologies as reverse osmosis or ion exchange treatment systems.

wastewater reuse and recycling; mitigate for and adapt to sea level rise and increased flooding; improve energy efficiency; and reduce greenhouse gas production.³ The Climate Action Initiative is consistent with the Governor's Executive Order B-30-15⁴ and the State Water Board's Climate Change Resolution No. 2017-0012.⁵

The proposed order aligns with the Climate Action Initiative's objectives to mitigate risks to water quality associated with climate change. To take steps towards building climate change adaptation on the Central Coast, the proposed order requires the Discharger to submit a coastal hazards response plan consistent with Coastal Development Plan 3-19-0020 to ensure the Discharger continues to identify and address climate change hazards and vulnerabilities to ensure continued function and viability of wastewater services in manner that is protective of water quality. To promote local water supply resiliency the proposed order includes new recycled water and volumetric reporting requirements and allows for the acceptance and discharge of advance water treatment wastes as noted above.

Environmental Justice

Environmental Justice principles call for the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income in the development, adoption, implementation, and enforcement of all environmental laws, regulations, and policies that affect every community's natural resources and the places people live, work, play, and learn. The Central Coast Water Board implements regulatory activities and water quality projects in a manner that ensures the fair treatment of all people, including Underrepresented Communities. Underrepresented Communities include but are not limited to Disadvantaged Communities (DACs), Severely Disadvantaged Communities (SDACs), Economically Distressed Areas (EDAs), Tribes, Environmentally Disadvantaged Communities (EnvDACs), and members of Fringe Communities.

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 ³ Central Coast Water Board staff presented a summary of initial efforts in response to climate change at the regularly scheduled Central Coast Water Board on December 6-7, 2018. A recording of the meeting, staff report, and presentations can be accessed online at: https://www.waterboards.ca.gov/centralcoast/board_info/agendas/2018/december/index.html
 ⁴ Governor's Executive Order B-30-15 can be accessed online at: https://www.library.ca.gov/wp-content/uploads/GovernmentPublications/executive-order-proclamation/39-B-30-15.pdf
 ⁵ State Water Board's Climate Change Resolution No. 2017-0012 can be accessed online at: https://www.waterboards.ca.gov/board_decisions/adopted_orders/resolutions/2017/rs2017_0012.pdf

⁶ Disadvantaged Community: a community with an annual median household income that is less than 80% of the statewide annual median household income (Public Resources Code section 80002(e)); Severely Disadvantaged Community: a community with a median household income of less than 60% of the statewide average (Public Resources Code section 80002(n)); Economically Distressed Area: a municipality with a population of 20,000 persons or less, a rural county, or a reasonably isolated and divisible segment of a larger municipality where the segment of the population is 20,000 persons or less with an annual median household income that is less than 85% of the statewide median household income and with one or more of the following conditions as determined by the department: (1) financial hardship, (2) unemployment rate at least 2% higher than the statewide average, or (3) low population density (Water Code

Furthermore, the Central Coast Water Board is committed to providing all stakeholders the opportunity to participate in the public process and provide meaningful input to decisions that affect their communities.

The proposed order regulates the production of recycled water and discharge of treated domestic wastewater to the Pacific Ocean. Using 2018 census data, the California Department of Water Resources Disadvantaged Community Mapping Tool⁷ identifies San Simeon Census Designated Place (CDP) as significantly disadvantaged. The Facility is located within the CDP identified as severely disadvantaged. The Central Coast Water Board has determined that the regulation of this publicly owned treatment works, in compliance with the proposed order, will not pose a significant threat to water quality and is therefore unlikely to impact DACs. If impacts to surface water result from the discharges regulated by the proposed order, the Central Coast Water Board will help facilitate outreach and education to inform affected parties and connect them with available resources.

COMMENTS

On November 5, 2021, Central Coast Water Board staff provided a preliminary draft of the proposed order for technical review and comment to the United States Environmental Protection Agency (USEPA). Central Coast Water Board staff met with USEPA staff on December 1, 2021, to discuss their feedback on the proposed order. USEPA comments resulted in minor revisions and clarifications to the draft order.

On November 10, 2021, Central Coast Water Board staff provided a preliminary draft of the proposed order for technical review and comment to the Discharger. The Discharger provided comments on the preliminary draft of the proposed order that resulted in minor revisions and clarifications.

Central Coast Water Board staff conducted early outreach to select stakeholders, particularly resource conservation agencies, prior to the public comment period. The purpose of this early outreach was to identify potential conflicts regarding the hauled saline waste disposal program and discharge of saline waste into protected waters off the coast of San Simeon. Between November 18, 2021, and December 3, 2021, Central

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section 79702(k)); Tribes: federally recognized Indian Tribes and California State Indian Tribes listed on the Native American Heritage Commission's California Tribal Consultation List; EnvDACs: CalEPA designates the top 25 percent scoring census tracts as DACs. Census tracts that score the highest five percent of pollution burden scores, but do not have an overall CalEnviroScreen score because of unreliable socioeconomic or health data, are also designated as DACs (refer to the CalEnviroScreen 3.0 Mapping Tool or Results Excel Sheet); Fringe Community: communities that do not meet the established DAC, SDAC, and EDA definitions but can show that they score in the top 25 percent of either the pollution burden or population characteristics score using the CalEnviroScreen 3.0.

⁷ The DAC Mapping Tool is used to inform statewide Integrated Water Resources Management (IRWM), Sustainable Groundwater Monitoring Act (SGMA), and California Water Plan implementation efforts and can be found at the following website: https://gis.water.ca.gov/app/dacs/.

Coast Water Board staff provided a draft copy of proposed Order No. R3-2022-0003 to the Monterey Bay National Marine Sanctuary, the California Coastal Commission, California Department of Fish and Wildlife, and California State Parks. Central Coast Water Board staff met with Monterey Bay National Marine Sanctuary, the California Coastal Commission, and California Department of Fish and Wildlife to discuss the provisions of the hauled saline waste program and receive feedback on the permit language as written. Staff incorporated feedback to the extent possible and invited the agencies to submit formal comment during public notification as needed.

On December 6, 2021, Central Coast Water Board staff posted the draft order to the Central Coast Water Board's website and notified the Discharger, agencies, and other interested persons (e.g., interested residents, environmental interest groups, environmental justice groups) of its intent to consider adoption of the proposed order and the opportunity to submit written comments during the 32-day public comment period. Written comments were due to the Central Coast Water Board by January 7, 2022.

Response to Comments

Central Coast Water Board staff received two comment letters during the 32-day public comment period. A summary of the comment letters and Central Coast Water Board staff response is below.

California Department of Fish and Wildlife (CDFW) submitted a letter to the Central Coast Water Board on January 4, 2021. The letter stated that the implementation of a hauled saline waste program may impact marine resources within the Cambria State Marine Conservation Area (SMCA)/State Marine Park (SMP), a California Marine Protected Area (MPA). Saline disposal through the outfall will increase salinity at and around the discharge point and could also release contaminants into the marine environment. If brine disposal is inconsistent, this will cause salinity at the discharge to fluctuate, which can impact a range of marine fauna and communities. In the comment letter, CDFW staff recognize that the hauled saline waste disposal study will be critical to ensure impacts to marine resources are avoided and minimized.

CDFW recommended that the hauled saline waste study include a detailed biological resources assessment, description of how the brine will be treated before disposal, and analysis of how brine disposal may fluctuate over time. Further, CDFW recommended coordination between CDFW and the Central Coast Water Board during the creation of the hauled saline waste disposal study as CDFW works to determine whether the saline waste discharge is an allowable activity within the Cambria SMCA/SMP.

Central Coast Water Board staff response: Staff modified the draft order to specify that as part of the hauled saline waste study the Discharger must include a detailed biological resources assessment, describe treatment of the saline waste (if any), and address expected fluctuation in quality and quantity of saline waste over time. Additionally, staff modified the draft order to specify that review of the hauled saline waste study will be conducted by convening a technical

advisory group composed of the Central Coast Water Board, California Coastal Commission, Monterey Bay National Marine Sanctuary, California Department of Fish and Wildlife, and State Parks.

California Coastal Commission submitted a letter to the Central Coast Water Board on January 7, 2021. Coastal Commission stated their alignment with CDFW's comments and submitted additional comments for consideration. The Coastal Commission stated that brine discharges require detailed and thorough assessments to ensure the protection of marine life and water quality, an especially important consideration as the proposed discharge would be within the Cambria SMCA/SMP. Additionally, the Coastal Commission expressed concern over existing repair and maintenance issues at the outfall that could increase the potential for breaks, spills, or unanticipated releases.

The Coastal Commission recommended the order also require that the applicant provide a copy of the study to the Coastal Commission and that the Executive Officer's consideration of the study incorporate any comments or concerns of the Coastal Commission and other involved agencies. The Coastal Commission stated that approval of the hauled saline waste study might best be accomplished by convening a technical advisory group with representatives of interested agencies for the limited purpose of evaluating the study.

Central Coast Water Board staff response: Staff modified the draft order to specify that a copy of the hauled saline waste study must be submitted to the California Coastal Commission. The proposed order has been updated to include a requirement to ensure that the outfall is adequately maintained and structurally sound prior to approval of a hauled saline waste disposal program. Additionally, staff specified that review of the hauled saline waste study will be conducted by convening a technical advisory group composed of the Central Coast Water Board, California Coastal Commission, Monterey Bay National Marine Sanctuary, California Department of Fish and Wildlife, and State Parks.

CONCLUSION

Proposed Order No. R3-2022-0003 maintains the existing effluent limitations and monitoring requirements and incorporates state and federal guidance and regulations, including new provisions associated with climate change adaptation and water supply resiliency. The proposed order is protective of water quality, requires a monitoring and reporting program sufficient to demonstrate compliance with the proposed order given the results of the reasonable potential analysis, and supports efforts to produce and reuse recycled water.

RECOMMENDATION

Adopt proposed Order No. R3-2022-0003.

ATTACHMENTS

1. Proposed Order No. R3-2022-003

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